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## **Home Improvement: Considering a Bathroom Installation**



I am a hundred percent sure that most of you always look for some home improvements. In fact, this idea occurs every day. However, most of us seldom focus our home improvements outside the home but rather inside, and the usual spot for such activity by most people is the bathroom. Well, for some reasons, the improvement involved in the bathroom is really important as we spend much time in that place.

In this article, I would be dealing with some tips and techniques for improving the looks of your bathroom. The main focus here is mainly on bathroom installation, particularly on shower or bathtub installation, bathtub enclosure and bathtub surround installation. But before anything else, let us look at some common mistakes and recommended guidelines involved with bathroom installation.

### **Most Common Mistakes and Guidelines for Bathroom Installation**

There are a number of common errors observed from most of the bathroom installation. Here is a list of those errors:

- Ignoring or violating local code restrictions
- Employing pipes that are too small
- Attaching copper to galvanized without employing a brass or dielectric fitting between the two
- Not considering Teflon tape or pipe compound especially at threaded joints
- Not installing an air gap filling for fixtures
- Not properly aligning tubing into fitting or stop valves
- Cutting supply stub outs too short to install the shutoff valves onto after the finished wall is in place
- Not leveling fixtures when installing them

Now, after knowing those errors, I think it is best for you to know some of the standards developed by the federal government for those who are thinking of a bathroom improvement. Note that these standards are highly applicable whether you are planning of designing a bathroom for wheelchair or just to make the room more comfortable and functional for anyone with limited mobility. Here are some of the recommended guidelines:

### ***Entrances***

Starting with your entrance into the room, I know that you want to make sure that the door is at least 32 inches wide. If you find that the doorway is located off a hallway and you have a wheelchair that must turn from the hall into the doorway, then the door width must be adjusted to about 36 inches. Also if possible, avoid putting a threshold in the doorway. However, if a particular threshold is needed, you try to choose a flat one that is no more than  $\frac{1}{4}$  inch high, or perhaps one that is beveled on both sides and no greater than  $\frac{3}{4}$  inch high. In case you have a member in the family with limited hand strength, a standard door knob can be very difficult to grip. So, what is commonly advised is to select a lever handle, instead of a knob. The height of this handles must be at 48 inches or less above the floor.

### ***Bathroom Fixtures***

As opposed to a conventional toilet which is about 14 to 15 inches above the floor, you can employ accessible toilets which are designed and developed so that the seat is between 17 to 19 inches above the floor. For the sink, you may want to make sure that the rim is no higher than 34 inches above the floor. Aside from that, the sinks should extend out at least 17 inches from the rear wall, and the area under the sink must be opened with a clearance of at least 29 inches starting from the floor to the bottom of the sink. If in case you want your sink to be installed in a countertop, consider putting it no more than 2 inches from the side of the counter. According to some experts, this promotes maximum accessibility. In addition, you can employ a protective boot over the

water lines and trap underneath the sink to prevent contact. Use a single-handle, lever-style faucet that is easily operated with one closed fist.

### ***Floor Covering***

Many homeowners considered the sheet vinyl flooring as the best choice. The main reason for this could be its smooth quality and its being easy to clean. However, if you are using a ceramic tile, try to choose large and smooth tiles so to lessen the grout lines and some surface irregularities. Also look for a non-slip surface texture. And, if you are considering floor carpeting, stick with naps that are ½ inch high or less.

### ***Interior Clearances***

This is another advice for those who are wheelchaired. Well, for you to make a 180-degree turn, a wheelchair needs at least 60 inches, which is 5 feet, of clearance. Note that this amount of clear space is oftentimes difficult to achieve, but consider a T-shaped space instead. Each side of the T must be at least 36 inches wide. According to some experts this configuration will allow space for a wheelchair to be able to comfortably make a three-point turn rather than having to maneuver in a complete circle. Along with this consideration, try to make pathways to any fixtures at least 36 inches wide. And, when it comes to the sink, it should have a clear space in front of it.

### ***Grab Bars***

Perhaps one of the wonderful features in just about any bathroom is the grab bars. These even make the bathroom safer and more convenient for anyone to use. Well, it is worth noting that if you are installing a horizontal grab bar, it should be positioned on the wall behind the toilet. You can install another one on the closet sidewall adjacent to the toilet. Also, the grab bars should be placed inside bathtub as well as shower enclosures. If you are remodeling or installing new and the walls in the room are open, make sure to provide wood blocking in the walls. This will allow simplification of the grab bars' attachment. Okay, enough about those guidelines. Let us now proceed to some steps to install your shower or bathtub.

### **How to Install Shower and Bathtub**

When thinking for installing a shower or bathtub, it is very important to note that the pipes required include the hot as well as cold supply lines, other than a pipe leading to a shower head. Also, many experts often suggest a blending valve and shower head for the installation, including air chambers.

Usually, the bath or shower fixtures rate low in fixture units. So they are often placed on the branch drains and wet or back vented as are the sinks. Accordingly, both the shower stalls and tubs enter the stack at floor level or below due to the angle of which the floor drain trap is positioned.

When it comes to faucet and shower head assembly, one should note that it requires an open wall for installation. Also worthy of consideration is that, bathtubs and shower stalls may need support framing. One of the common ideas here is that a bathtub filled with water is extremely heavy; therefore, it is important to examine first the building codes, including the framing support prior to the bathtub installation. There is also a required floor area for a shower stall. According to some experts, a minimum area required is 1,024 square inches, but you should also allow 24 inches from the stall itself to any other fixture or wall.

Here are the basic guidelines:

1. All piping should be installed before installing the tub itself.
2. Lower the tub into place. This will allow a continuous flange to fit against the wall studs and rests on 1 x 4 or 2 x 4 supports. In relation to this, don't forget to anchor the tub to the enclosure with nails or screws ensconced through the flanges into the studs.
3. Put together the drain connections. This can be done by way of attaching the tub overflow with the tub drain above the trap, and not beyond it. Note that the trap will have a compression fitting that screw over the arm of the overflow assembly.
4. Run the hot and cold water lines to the tub or shower mixing valve where they are attached. You can do this by sweating these directly into the hot and cold ports of the mixing valve.
5. Run a pipe up the wall for the shower head. Note however that on the top of this pipe, you should sweat on a brass female threaded winged fitting that is nailed or screwed into a framing support.
6. A piece of 1/2" pipe should be extended, but this must be in accordance to the instructions provided by the manufacturer, for the tub spout. Also sweat on a male threaded fitting at the end of the pipe or employ a brass nipple of the proper length as well as a 1/2" cap.
7. At this time, you will need to have your rough plumbing checked.
8. Restore water pressure and inspect the drain connection, including the supply pipes for any leaks.
9. Replace the wall with moisture resistant drywall as a base for your wall covering. Also important to note is to seal joints between the wall and your new tub perhaps with silicone caulk. This caulk will serve as protection against water seepage.
10. It is now time to install the handles, shower head and Spout. Note that the shower head screws onto the shower arm stub out. And, whether you are installing a new shower head or replacing an old one, always clean the pipe threads and apply a new pipe joint compound. You can also consider a Teflon tape or both to prevent leaks.

### **Installing a Bathtub Surround**

As you may know, a bathtub surround (commonly known as wall kit) is an easy way to provide a handsome, watertight and easy-to-maintain barrier around a tub or shower

alcove. These surrounds can be put up over plaster, tile, drywall or any solid and flat wall. Well, there some surround kits in the market these days. Most kits contain either three or five pieces that overlap to account for different dimensions. Also, these kits include instructions, which you should consider reading before you leave the store. When installing a bathtub surround, you may require an adhesive as well as color-matched caulk, so consider buying these from the store.

Now, you want to know the basics for installing a tub surround in your home? Here are the steps:

### **Step 1: *Prepare Walls***

Before anything else, it is important for you to save carton to use as a template. Then, start preparing the walls of the alcove by first removing the faucet spout and handles. You can remove these by trimming with screwdrivers, adjustable wrench or Allen wrench, as needed. Proceed to removing any soap dish or other obstacles. Then make any needed repairs to ensure that the existing surface is solid and secure. However, if the surface is slick, such as ceramic tile, consider sanding it with coarse sandpaper. Clean and re-caulk the tub joint.

One particular tip for this step is to consider installing support handrails to make your tub safer, especially if the framing is exposed. Also the rails must be anchored into framing or to wood blocking between studs about 21 inches above.

### **Step 2: *Consider Measuring***

Many experts suggest measuring the spout and faucet locations and transfer measurements onto a cardboard template that you cut from the shipping carton. Also, position the template on the wall and make any necessary modifications before tracing the openings onto the end wall panel.

The main tip here is to write “wall” on one side just to remind you which way the template must be positioned, especially when tracing cutouts onto the end panel.

### **Step 3: *Create Cuts***

As traced in the second step, you should cut the appropriate size holes in the panel by using a hole saw bit in an electric drill. How to do this? Okay! Place the panel face up on a scrap of plywood or other surface employed for drilling.

The tip here is to employ a jigsaw with fine-tooth blade to cut the large hole for a single valve control. Also, you can consider boring 3/8-inch starter hole for the saw blade anywhere inside the cutout area.

### **Step 4: *Consider Trial-Fitting***

Before considering trial-fitting, you should mark centerlines and level top lines on the walls and panels. If done, trial fit the sections of the wall in the order directed by the manufacturer. Also consider examining the tops and centerlines if aligned, or if the tops are leveled. Then, secure them with masking tape and trace the top edges on the wall with a pencil before removing the panels.

The tip for this fourth step is, if you need to cut a panel, employ the tool recommended by the manufacturer of the kit. Several of them can be cut with a number passes of a utility knife guided by a straightedge. Note that such tool produces the cleanest cut. And, a jigsaw with a fine-tooth blade may also be used.

### **Step 5: *Fix Panels***

You can fix panels by applying adhesive in beads with a caulking gun or spread with notched trowel, as recommended by the kit manufacturer. Also note that some of the panels may have peel-and-stick tape. You can also press the panels into place on your pencil lines. Some makers however suggest that you brace the walls with lumber until the adhesive has cured.

### **Step 6: *Finishing Touches***

After applying adhesives, allow it to cure for up to 24 hours before you apply a finish bead of caulk to all joints. This must be done in accordance to what is directed by the manufacturer. Then, replace the faucet spout and handles. Also allow caulk to cure as directed by the manufacturer before using the tub.

The idea here is to cut the tip of the caulk tube at a 45-degree angle and start with a small hole. Also, you can make it larger but not smaller.

### **Materials You Will Need**

Based on the given steps for installing a bathroom surround, here is a list of the materials you will need:

- Tape measure
- Level ( 2-ft. min.)
- Hole saw bits
- Utility knife
- Adhesive
- Allen wrench
- Bathtub surround kit
- V-notched trowel or caulking gun
- Pencil
- Electric drill
- Jigsaw
- Roofing cement

- Adjustable wrench
- Caulk
- Lumber to brace walls
- Standard and Phillips screwdrivers

## **Installing a Bathtub Enclosure**

Bathtub enclosures in the first place are a necessary finishing touch to a drop-in tub or a whirlpool tub. So, if you are considering any of those kinds of tub, then consider installing an enclosure.

Installing a bathtub enclosure is actually not as difficult as it looks. You can build it even with a little skill and of course with the right materials. Consider the following:

### ***Types and Sizes***

One of the most important considerations when it comes to building a bathtub enclosure is the type of the tub. In particular, the drop-in bathtubs that are made specifically for bathtub enclosures are said to be the best to build around. But, the whirlpool bathtubs are also great for building enclosures around.

An enclosure is basically necessary to hide the water pipes on both the drop-in and whirlpool tubs. So, it is important that when you consider building one, make sure to work around the plumbing as well as the draining systems to avoid interfering with pipes.

Here are the most recommended steps on how to build a bathtub enclosure:

### ***Step 1: Building a Tub Frame***

You can start building a tub enclosure by framing your tub. Construct a frame out of 2 x 4 lumber for every side of the tub not connected to the wall. Every side of the frame should compose of 2 pieces of wood the length of the side it is adjacent to. The two long pieces are supported by 2 x 4 studs placed every 16 inches. Then, the frame should be about 3/4-inch below the rim of the tub, just enough for the plywood and the tile to fit under the rim. Proceed by nailing the frames together and then attach each frame to the wall and floor with nails and construction adhesive of your choice.

### ***Step 2: Attaching the Frame to the Wall and Floor***

As often recommended, you can make the ledge of your enclosure as wide as you want. To extend your ledge on both sides, construct a second frame a few inches longer than the first and then install it parallel to the first frame. If in case you want your ledge to be wider than 16 inches, then build a third frame. Proceed by anchoring these additional extensions to the wall and floor parallel to the previously installed frames.

### **Step 3: *Covering and Sealing the Frame***

How to cover the frame? Simply attach ½ inch CDX plywood to the sides and tops of the frame with nails. There is also an alternative for that. Just use a moisture resistant wallboard. Also, use a caulk to seal all of the joints between the bathtub and the covered frame. Coat the wallboard or plywood with moisture resistant primer in order to seal it. And, let the primer dry completely.

### **Step 4: *Tiling of the Tub Enclosure***

You can cover the plywood or wallboard with a tile, wood or any finishing material once it is dry. Then, seal the finishing material well with tile grout, and proceed by caulking all the joints to prevent water damage.

### **Step 5: *Caulking of the Joints***

Once the tile or finishing material has been caulked and dried, you can apply a layer of caulk around the bathtub. Simply line all the edges of the tub with masking tape to make a straight line with the caulk. Then, apply the caulk to the edges of the tub and smooth it with your finger. Let it dry thoroughly and remove the tape.

That's simply it! So, good luck with your bathroom installation project.